

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	09502283
Filing Date	2000-02-11
First Named Inventor	Sun Ai Raillard
Art Unit	1639
Examiner Name	Epperson, Jon D.
Attorney Docket Number	70123.210US

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	5824485		1998-10-20	Thompson et al	
	2	5783431		1998-07-21	Peterson et al	
	3	5756316		1998-05-26	Volker Schellenberger	
	4	5426039		1995-06-20	Wallace et al	
	5	4683202		1987-07-28	Kary B. Mullis	

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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² j	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	9842727	WO	A1	1998-10-01	SRI International		<input type="checkbox"/>
	2	9522625	WO	A1	1995-08-24	Affymax Technologies N. V.		<input type="checkbox"/>
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	1	ARNHELM ET AL., "Polymerase Chain Reaction," C&EN 36-47 (October 1990)	<input type="checkbox"/>
	2	BARRINGER ET AL., "Blunt-end and single-strand ligations by escherichia coli ligase: influence on an in vitro amplification scheme," Gene 89:117-122 (1990)	<input type="checkbox"/>
	3	BOTSTEIN ET AL., "Strategies and applications of in vitro mutagenesis," Science 229(4719):1193-1201 (September 1985)	<input type="checkbox"/>
	4	CARTER, PAUL, "Site-directed mutagenesis," Biochem J. 237:1-7 (1986)	<input type="checkbox"/>
	5	CARTER ET AL., "Improved oligonucleotide site-directed mutagenesis using M13 vectors," Nucleic Acids Research 13(12):4431-4443 (1985)	<input type="checkbox"/>

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6	CHENG ET AL., "Long PCR," Nature 369:684-685 (June 1994)	<input type="checkbox"/>
7	CRAMERI ET AL., "1020-Fold aptamer library amplification without gel purification," Nucleic Acids Research 21 (18):4410 (1993)	<input type="checkbox"/>
8	DESOUZA ET AL., "Atrazine Chlorohydrolase from pseudomonas sp. strain ADP: Gene sequence, enzyme purification, and protein characterization," Journal of Bacteriology 178(16): 4894-4900 (August 1996)	<input type="checkbox"/>
9	FRITZ ET AL., "Oligonucleotide-directed construction of mutations: a gapped duplex DNA procedure without enzymatic reactions in vitro," Nucleic Acids Research 16(14):6987-6999 (1988)	<input type="checkbox"/>
10	GUATELLI ET AL., "Isothermal, in vitro amplification of nucleic acids by a multienzyme reaction modeled after retroviral replication," Proc. Natl. Acad. Sci 87:1874-1878 (March 1990)	<input type="checkbox"/>
11	KRAMER, WILFRIED ET AL., "Improved enzymatic in vitro reactions in the gapped duplex DNA approach to oligonucleotide-directed construction of mutations," Nucleic Acids Research 16(14):7207 (1988)	<input type="checkbox"/>
12	KRAMER, WILFRIED ET AL., "The gapped duplex DNA approach to oligonucleotide-directed mutation construction," Nucleic Acids Research 12(24):9441-9456 (1984)	<input type="checkbox"/>
13	KUNKEL, THOMAS A. ET AL., "Rapid and efficient site-specific mutagenesis without phenotypic selection," Methods in Enzymology 154:367-382 (1987)	<input type="checkbox"/>
14	KUNKEL, THOMAS A., "The efficiency of oligonucleotide-directed mutagenesis" in "Nucleic Acids and Molecular Biology," Eckstein and Lilley, eds. Springer Verlag, Berlin 2:124-135 (1988)	<input type="checkbox"/>
15	KWOH, ET AL., "Transcription-based amplification system and detection of amplified human immunodeficiency virus type 1 with a bead-based sandwich hybridization format," Proc. Natl. Acad. Sci. USA 86:1173-1177 (February 1989)	<input type="checkbox"/>
16	LANDEGREN ULF ET AL., "A ligase-mediated gene detection technique," Science 241:1077-1080 (August 1988)	<input type="checkbox"/>

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17	NAKAMAYE, KAY L., ET AL., "Inhibition of restriction endonuclease Nci I cleavage by phosphorothioate groups and its application to oligonucleotide-directed mutagenesis," Nucleic Acids Research 14(24):9679-9698 (1986)	<input type="checkbox"/>
18	OSTERMEIER, MARC ET AL., "A combinatorial approach to hybrid enzymes independent of DNA homology," Nature Biotechnology 17:1205-1209 (December 1999)	<input type="checkbox"/>
19	SAYERS, JON R. ET AL., "Strand specific cleavage of phosphorothioate-containing DNA by reaction with restriction endonucleases in the presence of ethidium bromide," Nucleic Acids Research 16(3):803-814 (1988)	<input type="checkbox"/>
20	SAYERS, JON R. ET AL., "5'-3' exonucleases in phosphorothioate-based oligonucleotide-directed mutagenesis," Nucleic Acids Research 16(3):791-802 (1988)	<input type="checkbox"/>
21	SCHATZ, PETER J., "Use of peptide libraries to map the substrate specificity of a peptide-modifying enzyme: a 13 residue consensus peptide specifies biotinylation in escherichia coli," Biotechnology 11:1138-1143 (October 1993)	<input type="checkbox"/>
22	SMITH, PAUL A. ET AL., "A plasmid expression system for quantitative in vivo biotinylation of thioredoxin fusion proteins in Escherichia coli," Nucleic Acids Research 26(6):1414-1420 (1998)	<input type="checkbox"/>
23	SMITH, MICHAEL ET AL., "In vitro Mutagenesis," Ann. Rev. Genet 19:423-62 (1985)	<input type="checkbox"/>
24	SOOKNANAN ET AL., "NASBA: A detection and amplification system uniquely suited for RNA," Biotechnology 13:563:564 (June 1995)	<input type="checkbox"/>
25	STEMMER ET AL., "Molecular breeding of viruses for targeting and other clinical properties," Tumor Targeting 4:1-4 (1999)	<input type="checkbox"/>
26	TAYLOR, JOHN ET AL., "The use of phosphorothioate-modified DNA in restriction enzyme reactions to prepare nicked DNA," Nucleic Acids Research 13(24):8749-8764 (1985)	<input type="checkbox"/>
27	TAYLOR, JOHN ET AL., "The rapid generation of oligonucleotide-directed mutations at high frequency using phosphorothioate-modified DNA," Nucleic Acids Research 13(24):8765-8785 (1985)	<input type="checkbox"/>

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28	VAN BRUNT, JENNIFER, "Amplifying genes: PCR and its alternatives," Bio/Technology 8:291-294 (April 1990)	<input type="checkbox"/>
29	WELLS, JAMES A. ET AL., "Cassette mutagenesis: an efficient method for generation of multiple mutations at defined sites," Gene 34:315-323 (1985)	<input type="checkbox"/>
30	WU, DAN Y. ET AL., "Specificity of the nick-closing activity of bacteriophage T4 DNA ligase," Gene 76:245-254 (1989)	<input type="checkbox"/>
31	ZOLLER, MARK J. ET AL., "Oligonucleotide-directed mutagenesis of DNA fragments cloned into M13 vectors," Methods in Enzymology 100:468-500 (1983)	<input type="checkbox"/>
32	ZOLLER, MARK J. ET AL., "Oligonucleotide-directed mutagenesis: A simple method using two oligonucleotide primers and a single-stranded DNA template," Methods in Enzymology 154:329-350 (1987)	<input type="checkbox"/>
33	ZOLLER, MARK J. ET AL., "Oligonucleotide-directed mutagenesis using M13-derived vectors: an efficient and general procedure for the production of point mutations in any fragment of DNA," Nucleic Acids Research 10 (20):6487-6500 (1982)	<input type="checkbox"/>
34		<input type="checkbox"/>

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☐ See attached certification statement.

☒ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Sharon M. Fujita/	Date (YYYY-MM-DD)	2007-10-16
Name/Print	SHARON M. FUJITA	Registration Number	38459

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